Before the
Federal Communications Commission
Washington, D.C. 20554
In the Matter of)
)
Video Device Competition
)
)
MB Docket No. 10-91

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In general we believe AllVid – is a concept – which is ripe and arrived at the right time –where the eco-system to make it a success exists – unlike cable card –
like multiple service providers in the same geographic location, need for a single device for Pay-TV, VOD, Home Content, Internet Content and other IP services.

Also we believe that time has come where the consumer is educated and aware of the benefits of Pay-TV/DVR etc. where it is seen more of a utility than a luxury, and should be made to pay the full price of the STB instead of burdening the service provider books by leasing the equipment to the consumer – tying the precious cash, 2) forcing the service provider to retain the customer by giving promotions/discounts on the hardware and some programming.

Several of the STB manufacturers run between 17% to 30% or so gross margins which is not sufficient to sustain innovation in this area. The only way to improve this situation is by making the consumer pay for the Navigation devices with no subsidy/lease for the navigation devices.

Below is our comments and thoughts – to make AllVid a reality.

DISCUSSION
Federal Communications Commission FCC 10-60
15.
Comments (GC):

Retail device was incrementally better than one provided by service provider –
Retail devices (DVR) entered the market ahead of the service provider offering– they were better than one provided by service provider, but it was only incremental from the consumer view – and he/she was settling for the one from service provider
as it was free or close to free - or no upfront costs of 3 or 4 hundred dollars – with a lease fees.
it was being delivered to his home – with out the need to shop
plus the retail device carried monthly service similar to SP device– so he didn't not see much reason to go and shop and own a retail device – atleast back in 90's it was a single purpose device, unlike now where there is room for such retail device to do more than just act as a STB or DVR –but can be a media server, online content etc.
Educating about the device was done by the Service Provider as they have a tigher/closer relation to the customer than a retail device vendor/retailer –so SP will try to push a product in his/her inventory to get the customer up and going.

Device incompatibility across MVPDs –
Back in 96, there was only one cable provider per location, Satellite has not really taken off – like now – where satellite is 40% of the market – so Device incompatibility wasn't a issues at least in '96 , very less percent moved much less crossed the territory of a service provider – but it is an issue NOW – as people have choices of atleast 3-4 service providers (1 cable, 2 satellite and atleast 1 Telco vendor)
Other factors:
Cost of the Retail Device > 300 or 400 dollars = complex buying decision/wait and watch
In general in consumer space – anything can be sold if priced under $99 –
As the price goes higher > more than 199 - the impulse-ness reduces and the purchasing decision involves multiple parties in a house hold – called the "Wife Factor" – So several of these retail devices are more than $399–complicating/prolonging the buying process – (atleast 30% of the cost can be attributed to the hard disk to support DVR functionality in the STB)
Monthly service fee – Retail STB (atleast one) too had a monthly service attached to it – so a customer wonders why he is paying a monthly service on top of one time purchase price – makes owning a retail STB less attractive
3) Incremental function of recording compared to STB – substitutes exist ie lease a DVR from Service provider – doesn't justify $400 purchase
4) Pricing in retail -- The retail devices also have what they call as retail tax ie. For example if a device sells for $99 in retail shelf then the manufacturer of the device has to sell it to the retail establishment for $70 – so the retail establishment can make some money – and if the manufacturer has to make some money say a gross margin of 50% - then he/she has to manufacture it for $35.
So now the customer has a choice of getting the same or similar box at $70 from Service provider or at $100 at a retail store – so the obvious choice is the service provider.
5) Acquisition of customer/educating the customer – This is done by the service provider and he/she

is educating the customer – and in several cases they are competing/lure from competition – so they are interested to get the customer up and going with the service fast with minimal hassles, so they may be hesitant to recommend a retail STB versus the one they have in stock

6) Market size too small -- Geographical go-to market strategy for retail STB - instead of broad across USA go-to market - Engineering complexity due to different conditional access/access technology – increases engineering costs and segments marketing and go-to strategies for a retail STB – increasing R&D/Sales/G&A costs for a retail STB.

9) No annuity income – Unlike service provider who is getting a regular montly revenue from the consumer – retail STB is a one time sale, coupled with small segmented markets – is a really unattractive market for any one to enter.

10) Enterprise/business vs consumer/residential customers – If we look at Phone/Wireless, PC, ISP markets – all these have started with Business customers – companies have made solutions for business customers, and then moved to consumers. Retail/Consumer is always difficult segment to make money – as ASP(Average selling price) is low – and the goods should be consumable for some business to keep innovating and survice- for example cell phones have a 2-3 year life, similarly with PCs. Where as STBs have had 3-5 years life coupled with single purpose nature and high cost and segmented markets, lack of annuity stream makes for a difficult retail environment for companies to enter.

16.

We think this is a good idea – whose time is ripe- which will spur innovation I hardware/software/UI/Installation/Servicing, creating interaction/integration from Hardware/software vendors/Service providers/Retail establishments.

Whether the AllVid adapter will be low-cost – it will be less than the current receivers/DVRs which are provided by the service providers as it will not have Hard disk and Audio/video inputs/outputs and remote control circuitry.

Barriers for retail market

1) If MVPD provides a AllVid navigation device – than it will cost less than the retail STB by atleast 30%, as the retail STB has to go through one more hop to reach the customer and each hop adds cost to the product.

2) There is room for MVPD to provide promotions for their receiver– which may inhibit the retail market

3) Currently 40 M plus is the Set-top/DVR market –if MVPD provides the receiver/DVR - the available market for retail STB will be far less – discourages investment

4) For retail this is a one time sale with no service revenue – so the receivers may be integrated into TV/Blu-ray, Game console etc. with real retail STBs market being far less.

A, The AIIVid Concept

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MVPD can participate in retail market – but the issue is relation of MVPD with customer is so tight and MVPD has several means to influence the buying decision of the customer – for a retail market to survive and grow – it has to be more like the current cell phone market – where the MVPD is the channel of sale for the device but does not influence the innovation of the device manufacturer – Several of the STB manufacturers run between 17% to 30% or so gross margins which is not sufficient to sustain innovation in this area, unless the navigation device market is made purchase only with no lease.

23.
As long as MVPD carries the STB on their books, ie engages in selling STBs either manufacturing (HW/SW/CA) inhouse or engages third parties to build but takes the selling/servicing/refurbishing/educating the customer – it will work against the retail STB
a. it will reduce the available market for the retail STBs –
b. Retail STBs will cost 30% more for a consumer for a similar STB from MVPD
c. MVPD has means/ways to influence the customer buying decision
d. Stiffles innovation – discourages investment- new entrants into the market
e. Retail STB is a onetime sale – while MVPD can subsidize as they have annuity/service stream
B. AIIVid Standards
24. We Suggest looking at RVU alliance –as a first step.

25. AllVid Equipment.
Set-back will serve single TV or Basic cable consumers - or multiple TV with no DVR configuration- or for a customer to try a service – one in one room – other in another room – before switching
The gateway with six channels – FCC should let market decide - this is similar to mandating firewire/1394 – which did not pan out well.

26. Physical connection. The IOO-BASE-TX Ethernet is fine for a receiver but not for the AllVid Gateway.
MoCA is will serve that purpose for the next 2-3 years. But we suggest let the market decide.

A physical layer technology should not be mandated – but 100-Base-TX is a defacto standard with all Smart TV/Blue-ray/Game console devices – with Gigabit coming in next few years
There is enough bridges exist to bridge one layer to another – eg – MoCA to Ethernet – so if a service

provider has MoCA – they can provide a MoCA to Ethernet bridge to the customer

Internet Video and AllVid Adapter – not a problem in Cable/Verizon/DirecTV case – AT&T/Echostar needs clarification

27. Communication Protocol. IP is a good choice
28. Encryption and Authentication – needs a technical working committee
29. Content Ordering and Billing.
MVPDs – charge per outlet – so they would like to know how many devices are connecting
For PPV/VOD – they would like to have confirmation – but this can be hashed out by defining an API or through a technical committee

30. Service Discovery. DLNA/UPNP-AV are a good choice
31. Content Encoding Needs a technical committee to make some recommendations
32. Intellectual Property.
33. Other Issues. We need a technical committee to look into all this issues -
Sending a message back – that no more streams available should be sufficient with a detailed info on what the other six streams will help consumer to turn off one of them – like may be a program getting recorded or TV left on. This can happen even in the case where the customer will subscribe to two streams but three devices want to access the stream.
34.
35, We seek comment also on whether navigation devices in the AliVid system should include over-the-air ATSC tuners,
Not needed – as the TVs will have TV tuners. 2) 98% of US population subscriber to Pay-TV – which includes basic video/digital video/Premium channels from Cable/Satellite/Telcos. 3) This tuner will add an addition cost of $30 in retail at the current prices. 4) Retail products exist to connect OTA transmissions via Ethernet – so a retail navigation device can support this products
http://hd.engadget.com/2006/10/30/engadget-hd-review-hdhomerun/

36,
DirectTV is a member of RVU alliance – where a thin client is envisaged to view linear programming/DVR content and VOD content. So what ever technology DirecTV is using for this thin client to enable VOD should be good for Echostar – or a technical team can be formed to come up with some open standards.

The commission should come up with a technical committee to define standards to meet the current requirements – for device authentication/authorization/management/trouble shooting.
A business committee or a

A marketing committee to promote awareness among the consumers, define interoperability logo program etc.

C. AIIVid Support Requirements

37, The National Broadband Plan calls for Commission action to require MVPDs who offer digital navigation devices for lease to be prcpared to offer A1IVid equipment to their subscribers by December 31,2012.·' We seek comment on that deadline, including measures that would be effective in enforcing it.

The deadline is possible – with effective management. There are some open issues in defining communication protocols/APIs between AllVid adapter and the navigation device.

For this to happen the retail devices have to be on shelf stores by August ’12. And a 12 to 18 month product cycle is needed. All technical specifications needs to be done by end of this year or at best March of 2011 and marketing/business programs defined by July/August of ’11.

RVU Alliance solution can be used as a starter – as there is enough momentum around that solution.

38.

39. Navigation Device Economics. Certain parties suggest that a retail market for navigation devices may be destined to fail because consumers are not interested in owning navigation devices·' We seek comment on this assessment, including whether consumers prefer to lease at government-regulated "cost-plus" rates,70 whether consumers wish to avoid the risk obsolescence of navigation devices, and whether consumers' inability to "port" a retail navigation device when he or she changes MVPDs limits the attractiveness of the retail option. The cable industry has adopted the leasing model, charging customers a monthly fee that allows consumers to avoid a larger upfront cost entailed by a retail purchase.

To evaluate the leasing versus retail equipment models, we seek data on consumer behavior when faced with a lease versus purchase decision, concerning navigation devices and analogous consumer electronic devices. We expect that MVPDs will want to continue to offer devices for lease or sale that provide greater functionality than an AIIVid adapter. Should we require those devices to attach to the AllVid network, through an adapter? How would our decision on whether operator-provided navigation devices must commonly rely on the AIIVid network affect the economics of the retail and leasing markets?

Consumers are not interested in owning a device which does just navigation alone – but they would like a multi-service device. For example one which lets them add extra hard drive, acts as a media server to store/share/view photos/music/videos, one which has soft/casual gaming, one which integrates blu-ray or other communications functionality – which will reduce clutter of multiple devices.

More than government-regulated “cost-plus” – the key would be not to let MVPDs carry hardware on their books, eliminate leasing.
The retail box will cost 30% to customer than what it costs to buy from a MVPD, due to one more hop in reaching the customer – 2) retail STB is a one time sale with no annuity – so these two factors can cause retail STB to fail.

40. What are consumer expectations with respect to "navigation devices?"
Consumer expects a mutli-service device – of which navigation device is one of the functions - RVU alliance – has a client which can go into other devices like – Blu-Ray, Smart Mobile Phones, Tablets/Slate computers

41. Would MVPDs be at an advantage in providing set-top boxes because they could provide home installation whereas consumers typically would have to install devices purchased in the retail market themselves? Do MVPDs earn a profit on home installations or, if not, would self-installations of
retail devices by MVPD customers save MVPDs money?

MVPD is at a advantage due to price rather than home installation. Current homes have so many devices and the home network is so complex – MVPD installer are at a disadvantage – compared to GeekSquad from BestBuy. Because the MVPD installer is a contractor who is paid per installation and is on clock who is more experienced in cable/satellite technology than home network technology—

MVPDs don’t or may not make a profit on installation – as either it is free as a promotion or the installers spend more time due to home network complexity.

42. In response to NBP PN #27, several MVPDs expressed reservations about a "home gateway" technology mandate."
Home Gateway is not a viable solution – for starters it puts DBS at disadvantage – 2) Consumers may want to buy their Voice service from vendors independent of the broadband provider 3) Some operators provider wireless built-in which several consumers would like to get their own wireless routers –which are high performing in data and range.
AllVid proposal does not effect the development of the DCAS – it is upto the operator what type of

CAS they use – as AllVid is the Network termination point.

43. Content Presentation.
All MVPDs provide Ethnic content packages – it would be nice to provide EPG in ethnic language – this is only possible if the navigation device is allowed to do innovations. Presentation is better done by Navigation device atleast in some cases like the above – so would be nice to get the EPG data as XML format.

to whom subscribers should call with questions about problems associated with the user interface, service,
and hardware compatibility.

This can be resolved through technical committee and Tivo could serve as a good example.

44. EPG can be provided by MVPD or as a differentiated offering from the navigation device vendor, but it will probably add to the cost of the navigation device.
45. Authority.